Examiner: Thong Vu

#### **REMARKS**

The Applicants submit the following remarks in response to the Office Action mailed February 1, 2008, which rejected claims 178-276. The amendments above and remarks that follow address all of the points raised in the Office Action and, thereby, place all pending claims in condition for allowance.

# I. Status of Prior Claim Amendments

As a preliminary matter, based on the Office Action it appears that the amendments submitted on 1/17/08 by the Applicants have not been entered. Those amendments cancelled claim 269 and amended claims 199, 213, 220 and 257. In this response, the Applicants have addressed the claims on the assumption that the prior amendments were proper and will indeed be entered (e.g., concurrent with entry of the amendments requested in this response). If the Examiner disagrees or requires another submission, then the Applicants request that the Examiner contact the undersigned at the earliest opportunity to discuss this issue.

### II. Claim Amendments

The Applicants have amended claims 190 and 220 to correct typographical errors. No new matter is added.

### III. Double Patenting

The Examiner rejects claims 178-276 on grounds of non-statutory double-patenting in view of U.S. Patent No. 6,799,195.

The Applicants are submitting a terminal disclaimer under 37 CFR 1.321 herewith to overcome this rejection. The Applicants submit the terminal disclaimer to expedite prosecution

Examiner: Thong Vu

and this submission should not be construed as agreement with or affirmation of the doublepatenting rejection or the reasoning that underlies it.

# IV. Claim Rejections Under 35 U.S.C. § 102(e)

In the Office Action, the Examiner rejects claims 178-276 under 35 U.S.C.§ 102(e) as allegedly anticipated by U.S. Patent No. 5,903,455 to Sharpe, Jr. et al. ("Sharpe"). The Applicants traverse.

# A. Sharpe Does Not Anticipate Independent Claim 178

Claim 178 is generally directed to a process control system which includes a plurality of devices to any of monitor and control a process and a portable computer that is equipped for display to, and input from, an operator. The process control system also includes a program executing on the portable computer to transmit a request to a digital data processor that is separate from the portable computer. The request is made to update information that controls one or more of the devices. The system also includes software executing on the digital data processor, the software responding to selected requests received from the program to issue a command to update information that controls one or more of the devices.

The Examiner contends that Sharpe anticipates claim 178. The Applicants respectfully disagree. For example, Sharpe does not disclose, inter alia, "a program executing on a portable computer that responds to input to transmit requests to a separate digital data processor to update information that controls one or more devices," as recited in part C of claim 178. The Examiner contends that Sharpe's laptop 46 is such a portable computer, citing Sharpe at col. 6, line 36. But that is not the role that Sharpe's laptop 46 performs in his system.

Examiner: Thong Vu

Sharpe purports to disclose a Field Management Solutions (FMS) system 10 executing on a computer, such as a personal computer (PC) running Microsoft Windows. (See Figure 1, reproduced below.) Though Sharpe suggests that the operator uses the FMS system 10 to communicate with smart devices 12 via communication line 42 (see col. 6, lines 29-65), he does not propose use of a portable computer for that purpose. Indeed, Sharpe teaches just the opposite!

As Sharpe notes, in some cases, the smart devices 12 may not be connected to the FMS system 10. (See id.) To communicate with an unconnected smart device 12, Sharpe suggests physically moving a laptop 46 into vicinity of the unconnected smart device 12, temporarily connecting to the laptop to the smart device and, then, bringing the laptop 46 back to the FMS system 10, where it (the laptop 46) can be reconnected to the FMS system 10 to upload data from the smart device 12. (See id.)

In contrast, Part C of Applicants' claim 178 calls for a program executing on a portable computer that, in response to input, transmits a request to a separate digital data processor to update information that controls one or more of the devices. Further, as specified in part D of claim 178, the digital data processor executes software that responds to requests from the portable computer by issuing a command to update information that controls one or more of the devices. Sharpe does not teach or suggest such a program and/or portable computer.

Sharpe not only fails to teach the limitations recited in claim 178, but vigorously teaches away from them. The problem Sharpe purports to address is how to communicate with his smart devices that are not connected to the user-operated FMS system 10. (See col. 6, lines 29-45.)

Examiner: Thong Vu

In U.S. Patent No. 6,094,600, the parent of the Sharpe reference relied on by the Examiner, Sharpe says that "the FMS system 10 can change a device only if it is <u>coupled to the device</u>..." (See col. 24, line 25-26. Emphasis added.) Sharpe expresses concern that his FMS system 10 cannot be permanently connected to all of the smart devices because "such permanent connections typically are costly to install." (See col. 23, lines 59-63.) To solve this problem, Sharpe offers two clumsy, impractical solutions:

- First, he says, the smart device "can be transported to the site of the FMS system 10 and interfaced with the FMS system 10 via a transient connection to a serial interface..." (Col. 24, lines 38-40.)
- Second, as described above, the laptop 46 can be "transiently connected to...the FMS system 10 and instructed by the FMS system 10 to make the required changes." (Col. 24, lines 42-53.) The laptop 46 is then "disconnected from the FMS system 10 and taken by a field operator to each remote field device in which a change is to be made." (Id.)

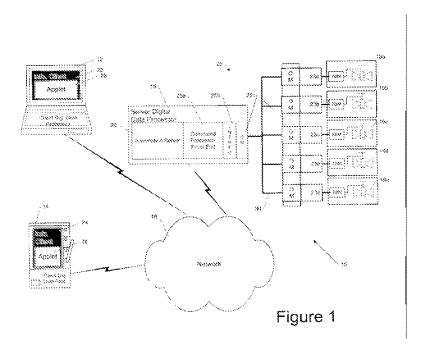
In other, words, Sharpe suggests communicating with smart devices 12 by carrying the smart devices 12 to the FMS system 10, or by using a laptop 46 to ferry data between the smart devices 12 and the FMS system 10.

Thus, Sharpe's system is focused on carrying laptops and/or smart devices around a facility. Sharpe completely fails to realize the solutions developed and now claimed by the Applicants. In the process control system recited in Applicants' claim 178, for example, a program executes on a portable computer that, in response to input, transmits a request to a separate digital data processor to update information that controls one or more of the devices.

Examiner: Thong Vu

The portable computer is thus doing more than ferrying data back and forth. And, as the portable computer can be anywhere, there is no need to walk around to devices.

One embodiment of such a system is shown in Figure 1 of the Applicants' specification, reproduced below for illustrative purposes only. As shown, a portable computer 12, 14 can transmit a request to a separate digital data processor 16 to update information that controls one or more devices 19a-e:



Sharpe does not disclose the system of claim 178 but teaches away from it. For at least these reasons, claim 178 is allowable over Sharpe.

## B. Sharpe Does Not Anticipate Independent Claim 190

Claim 190 is generally directed to a process control system of the type having a plurality of devices to any of monitor and control a process. The system includes a portable computer

Examiner: Thong Vu

equipped for display to, and input from, an operator and a program executing on the portable computer that transmits requests to a digital data processor, which is disposed remotely from the portable computer and is coupled for communication therewith via a wireless network. The requests are to update information that controls one or more of the devices, the program responding to operator input to transmit requests to get information reflecting the status of one or more of the devices and/or displaying said information. The system further includes software executing on the digital data processor, the software responding to requests received from the program to selectively (a) issue a command to update information that controls one or more of the devices and (b) obtain information pertaining to one or more of the devices.

The Examiner contends that Sharpe anticipates claim 190. The Applicants respectfully disagree. The arguments presented above in connection with claim 178 apply with equal force here to establish that claim 190 is patentably distinct from the teachings of Sharpe. More specifically, by way of example, Sharpe does not teach or suggest, inter alia, "a program executing on the portable computer that transmits to a digital data processor requests to update information that controls one or more of the devices, the program responding to operator input to transmit requests to get information reflecting the status of one or more of the devices and/or displaying said information," as recited in part B of claim 190.

In addition, Sharpe fails to teach or suggest that "the digital data processor is disposed remotely from the portable computer and is coupled for communication therewith *via a wireless network*," as recited in part D of claim 190. Sharpe does not disclose a wireless network coupling a portable computer and a digital data processor, but instead *specifically encourages* an approach that involves carrying laptops and/or smart devices around a facility — as discussed in

Examiner: Thong Vu

detail above. For this additional, independent reason, claim 190 patentably distinguishes over Sharpe.

For at least these reasons, claim 190 is allowable over Sharpe.

# C. Sharpe Does Not Anticipate Independent Claim 199

Claim 199 is generally directed to a process control system which includes a plurality of devices to any of monitor and control a process, and a portable computer equipped for display to, and input from, an operator. The system also includes a digital data processor coupled to the portable computer via a wireless network. The system includes software executing on the digital data processor, the software responding to selected requests received from the portable computer to execute a service. The service is for at least one of (i) creating a named object that stores information regarding the one or more control/sensing devices, (ii) destroying such an object, (iii) accessing information in such an object, (iv) updating information in such an object, (v) determining, from an object name, a physical address associated with such an object, and (vi) providing notification of changes in at least selected information stored in such an object. Furthermore, the portable computer transmits to the digital data processor requests for one or more of these services, and responds to input to transmit to the digital data processor requests for one or more of these services in order to update information in an object that is associated with one or more of the devices.

The Examiner contends that Sharpe anticipates claim 199. The Applicants respectfully disagree. The arguments presented above in connection with claims 178 and 190 apply with equal force here to establish that claim 199 is patentable over Sharpe.

Examiner: Thong Vu

More specifically, for example, Sharpe does not teach or suggest, inter alia, "E. the portable computer transmitting to the digital data processor requests for one or more said services, and responding to input to transmit to the digital data processor requests for one or more of said services in order to update information in an object that is associated with one or more of the devices," as recited in part E of claim 199.

Sharpe also does not teach or suggest, inter alia, "C. a digital data processor coupled to the portable computer *via a wireless network*," as recited in part C of claim 199.

For at least these reasons, among others, claim 199 is allowable over Sharpe.

# D. Sharpe Does Not Anticipate Independent Claim 213

Claim 213 is generally directed to a process control system which includes a plurality of devices to any of monitor and control a process, and a portable computer equipped for display to, and input from, an operator. The system also includes a digital data processor coupled to the portable computer via a wireless network, and software executing on the digital data processor. The software responds to selected requests received from the portable computer to execute a service for at least one of (i) creating a named object that stores information regarding the one or more control/sensing devices, (ii) destroying such an object, (iii) accessing information in such an object, (iv) updating information in such an object, (v) determining, from an object name, a physical address associated with such an object, and (vi) providing notification of changes in at least selected information stored in such an object.

The Examiner contends that Sharpe anticipates claim 213. The Applicants respectfully disagree. The arguments presented above in connection with claims 178 and 190 apply with equal force here to establish that claim 213 is patentable over Sharpe.

Examiner: Thong Vu

More specifically, for example, Sharpe does not teach or suggest, inter alia, "D. software executing on the digital data processor, the software responding to selected requests received from the portable computer to execute a service for at least one of (i) creating a named object that stores information regarding the one or more control/sensing devices, (ii) destroying such an object, (iii) accessing information in such an object, (iv) updating information in such an object, (v) determining, from an object name, a physical address associated with such an object, and (vi) providing notification of changes in at least selected information stored in such an object," as recited in part D of claim 213.

Sharpe also does not teach or suggest, inter alia, "C. a digital data processor coupled to the portable computer *via a wireless network*," as recited in part C of claim 213.

For at least these reasons, among others, claim 213 is allowable over Sharpe.

## E. Sharpe Does Not Anticipate Independent Claim 229

Claim 229 is generally directed to a portable computer for use in a control system that includes one or more control/sensing devices to monitor and/or control a process. Also included is a program that executing on the portable computer configures it as a process controller for purposes of at least controlling one or more of the control/sensing devices. The portable computer, when configured as a process controller, exchanges messages over a wireless network with a server digital data processor for purposes of controlling one or more of the control/sensing devices. The messages include requests, transmitted by the portable computer to the server digital data processor, for services provided by the server digital data processor, which include at least one of (i) accessing information regarding the one or more control/sensing devices, (iii) determining a

Atty. Docket No. 102314-160

Application No. 10/765,006

Examiner: Thong Vu

physical address associated with the one or more control/sensing devices, and (iv) providing notification of changes in at least selected information pertaining to the one or more control/sensing devices.

The Examiner contends that Sharpe anticipates claim 229. The Applicants respectfully disagree. The arguments presented above in connection with claims 178 and 190 apply with equal force here to establish that claim 229 is patentable over Sharpe.

More specifically, for example, Sharpe does not teach or suggest, inter alia, "B. the portable computer, when configured as a process controller, exchanging messages over a wireless network with a server digital data processor for purposes of controlling the one or more control/sensing devices," as recited in part B of claim 229.

Sharpe also does not teach or suggest, inter alia, "C. a digital data processor coupled to the portable computer *via a wireless network*," as recited in part C of claim 229.

For at least these reasons, among others, claim 229 is allowable over Sharpe.

# F. Sharpe Does Not Anticipate Independent Claim 243

Claim 243 is generally directed to a digital data processor for use in a control system that includes one or more control/sensing devices to monitor and/or control a process. Also included is a program executing on the digital data processor in order to configure it as a process controller for purposes of at least controlling the one or more control/sensing devices. The digital data processor, when configured as a process controller, exchanging messages over a wireless network for purposes of controlling the one or more control/sensing devices. The messages include requests, transmitted by the digital data processor for object management

Examiner: Thong Vu

services including services for at least one of (i) accessing information regarding the one or more control/sensing devices, (ii) updating information regarding the one or more control/sensing devices, (iii) determining a physical address associated with the one or more control/sensing devices, and (iv) providing notification of changes in at least selected information pertaining to the one or more control/sensing devices.

The Examiner contends that Sharpe anticipates claim 243. The Applicants respectfully disagree. The arguments presented above in connection with claims 178 and 190 apply with equal force here to establish that claim 243 is patentable over Sharpe.

More specifically, for example, Sharpe does not teach or suggest, inter alia, "B. the digital data processor, when configured as a process controller, exchanging messages over a wireless network for purposes of controlling the one or more control/sensing devices," as recited in part C of claim 243.

The Applicants understand the Examiner to be contending that Sharpe's server 66 shown in Fig. 2 is a digital data processor as recited in claim 243. However, the server 66 is not connected to a wireless network for purposes of controlling the one or more control/sensing devices. As already explained, Sharpe specifically says that unconnected devices are brought to the FMS system 10 to be connected to it, or that a laptop is used to ferry information back and forth to them. As such, Sharpe cannot be understood to teach a digital data processor exchanging messages over a wireless network for purposes of controlling the one or more control/sensing devices, as recited in part C of claim 243.

For at least these reasons, among others, claim 243 is allowable over Sharpe.

Examiner: Thong Vu

# G. Sharpe Does Not Anticipate Independent Claim 257

Claim 257 is generally directed to a method of operating a digital data processor, which includes a wireless network connection, for use in a control system that includes one or more control/sensing devices to monitor and/or control a process. The method further includes configuring the digital data processor as a process controller for purposes of controlling one or more of said control/sensing devices, and exchanging one or more messages in a form of any of text and ASCII format via said wireless network connection for purposes of effecting said controlling of the one or more control/sensing devices.

The Examiner contends that Sharpe anticipates claim 243. The Applicants respectfully disagree. The arguments presented above in connection with claims 178 and 190 apply with equal force here to establish that claim 243 is patentable over Sharpe.

More specifically, for example, Sharpe does not teach or suggest "B. exchanging one or more messages in a form of any of text and ASCII format *via said wireless network connection* with another digital data processor for purposes of effecting said controlling of said one or more said control/sensing devices." Sharpe does not disclose such a wireless connection, as Sharpe focuses on carrying around laptops and/or devices.

In addition, Sharpe does not teach or suggest, inter alia, "B. exchanging one or more messages in a form of any of text and ASCII format via said wireless network connection with another digital data processor for purposes of effecting said controlling of said one or more said control/sensing devices," as recited in part B of claim 257.

In rejecting now-cancelled claim 269, whose limitations are now in claim 257, the Examiner contends that Sharpe teaches exchanging one or messages in text and ASCII format,

Atty. Docket No. 102314-160

Application No. 10/765,006

Examiner: Thong Vu

citing col. 7, lines 1-8, as allegedly showing the "text and ASCII format." The Applicants respectfully disagree. The cited passage merely states that Sharpe's system can operate in a Microsoft Windows environment, as well as using Mac, Xwindows or IBM DOS formats. Thus Sharpe apparently discloses that his system can utilize any of several operating systems. But the cited passage does not mention exchanging messages and the Applicants do not understand it to teach "exchanging one or more messages in a form of any of text and ASCII format via said wireless network connection with another digital data processor for purposes of effecting said controlling of said one or more said control/sensing devices."

For at least these reasons, among others, claim 257 is allowable over Sharpe.

H. Sharpe Does Not Anticipate Dependent Claims 179-189, 191-198, 200-212, 214-228, 230-242, 244-256, 258-268, 270-276

Each of the above-recited dependent claims depends from one of the independent claims discussed above and is allowable for at least that reason, among others.

Application No. 10/765,006 Atty. Docket No. 102314-160

Examiner: Thong Vu

V. **Conclusion** 

In light of the foregoing, the Applicants believe that the application is in condition for

allowance. The Examiner is encouraged to telephone the undersigned attorney for the

Applicants if such communication will expedite prosecution of this application.

No fee is believed due with this submission. However, the Director is hereby authorized

to charge any deficiency in the fees filed, asserted to be filed or which should have been filed

herewith (or with any paper hereafter filed in this application by this firm) to our Deposit

Account No. 141449, under Order No. 102314-160.

Respectfully submitted,

Date: July 1, 2008

/Joshua T. Matt/

Joshua T. Matt (Reg. No. 55,435)

Attorney for Applicants

Nutter McClennen & Fish LLP 155 Seaport Boulevard Boston, MA 02210-2604

Tel: (617) 439-2651

Fax: (617) 310-9651

1744610.2